

Kramer Electronics, Ltd.



USER MANUAL

Models:

RB-8, 8 Channel Power Controller

RB-8E, 8 Channel Power Controller

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1 Introduction

Welcome to Kramer Electronics! Since 1981, Kramer Electronics has been providing a world of unique, creative, and affordable solutions to the vast range of problems that confront the video, audio, and presentation professional on a daily basis. In recent years, we have redesigned and upgraded most of our line, making the best even better! Our 500-plus different models now appear in eight groups¹ that are clearly defined by function.

Thank you for purchasing the Kramer **RB-8/RB-8E 8 Channel Power Controller**, which is ideal for:

- Production studios
- Large multimedia displays
- Home entertainment installations

Each package includes the following items:

- The **RB-8/RB-8E 8 Channel Power Controller**. (The **RB-8** is a model for use in America with 110V AC American power sockets, and the **RB-8E** is for use in Europe with 220V AC European power sockets)
- Power cord²
- This user manual³

2 Getting Started

We recommend that you:

- Unpack the equipment carefully and save the original box and packaging materials for possible future shipment
- Review the contents of this user manual
- Use Kramer high-performance high resolution cables⁴

¹ GROUP 1: Distribution Amplifiers; GROUP 2: Video and Audio Switchers, Matrix Switchers and Controllers; GROUP 3: Video, Audio, VGA/XGA Processors; GROUP 4: Interfaces and Sync Processors; GROUP 5: Twisted Pair Interfaces; GROUP 6: Accessories and Rack Adapters; GROUP 7: Scan Converters and Scalers; and GROUP 8: Cables and Connectors

² We recommend that you use only the power cord supplied with this device

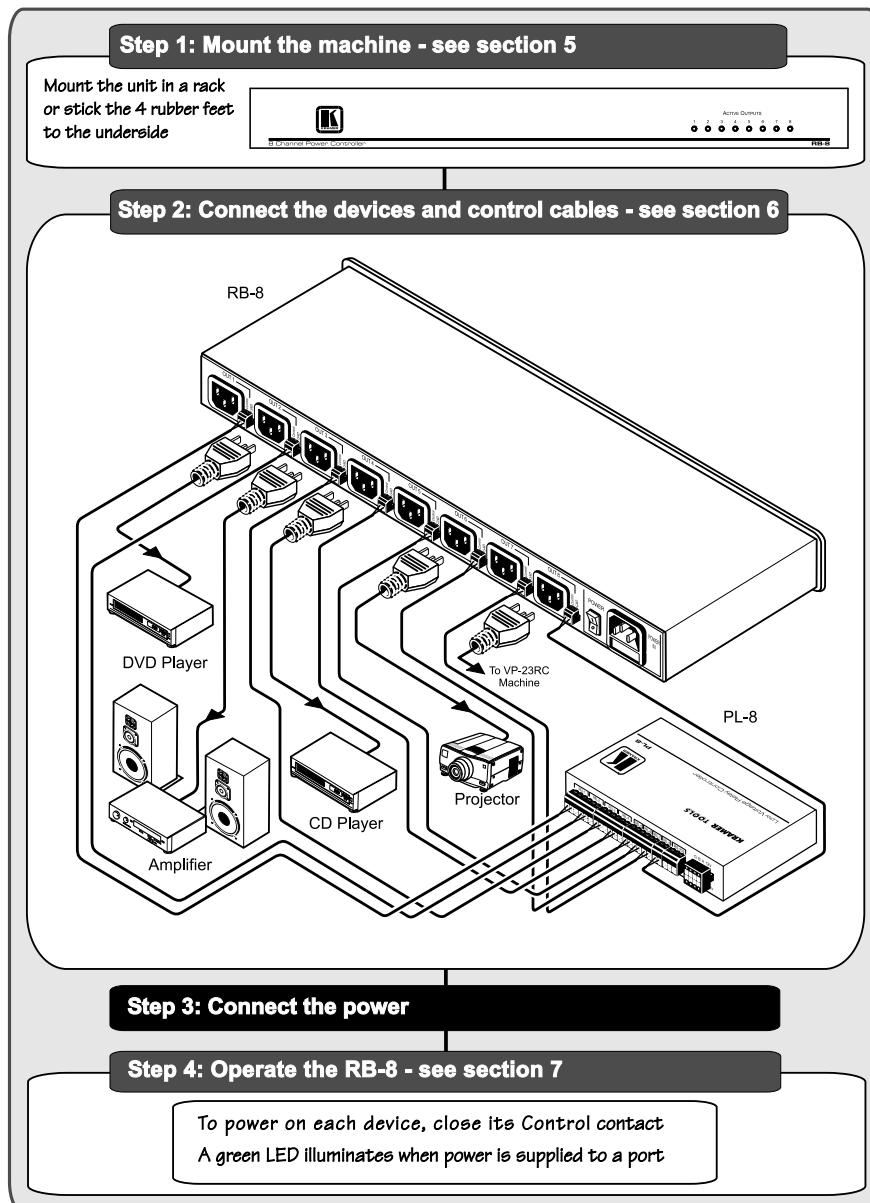
³ Download up-to-date Kramer user manuals from our Web site at <http://www.kramerelectronics.com>

⁴ The complete list of Kramer cables is on our Web site at <http://www.kramerelectronics.com>



2.1 Quick Start

This quick start chart summarizes the basic setup and operation steps.



3 Overview

The Kramer **RB-8** is a high-performance, high-voltage power supply that supplies power to up to eight external units. Each output channel includes a power socket and a 2-pin terminal block control port. When the control port is connected, the contact-closure supplies power to that channel. LEDs on the front panel indicate which ports are supplying power to their devices.

The **RB-8** is housed in a 19-inch, 1U rack-mountable enclosure, and is powered by a 100–240V AC universal switching power supply. The **RB-8** is a model for use in America with 110V AC American power sockets, and the **RB-8E** is for use in Europe with 220V AC European power sockets. “**RB-8**” is printed on the front panel of both models.

To achieve the best performance:

- Use only good quality connection cables¹ to avoid interference, deterioration in signal quality due to poor matching, and elevated noise levels (often associated with low quality cables).
- Avoid interference from neighboring electrical appliances that may adversely influence signal quality and position your Kramer **RB-8** away from moisture, excessive sunlight and dust

4 Your RB-8/RB-8E 8 Channel Power Controller

Table 1, Figure 1, Figure 2, and Figure 3 define the unit.

Table 1: RB-8/RB-8E 8 Channel Power Controller Functions

#	Feature	Function
1	ACTIVE OUTPUT LEDs	Illuminate green when supplying power (from 1 to 8)
2	OUT Female power socket	AC connector enabling power supply to the attached unit (from 1 to 8)
3	CONTROL Pin	When grounded, the port powers ON (from 1 to 8)
4	GND (Ground) Pin	Ground for control contact (from 1 to 8)
5	POWER Switch	Illuminated switch for turning the unit ON and OFF
6	POWER IN with fuse	AC connector supplying power to the RB-8

¹ Available from Kramer Electronics on our Web site at <http://www.kramerelectronics.com>

Your RB-8/RB-8E 8 Channel Power Controller

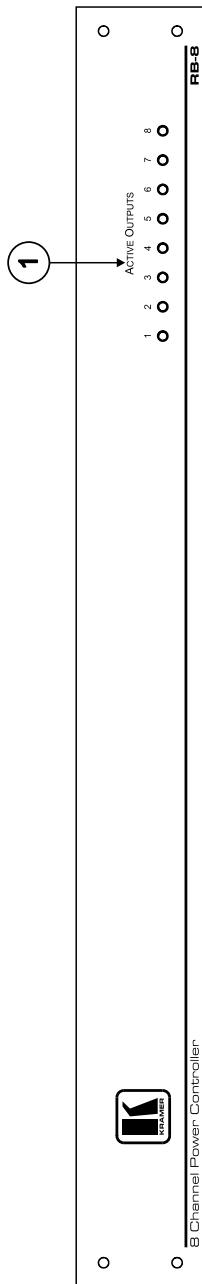


Figure 1: RB-8 / RB-8E Front Panel

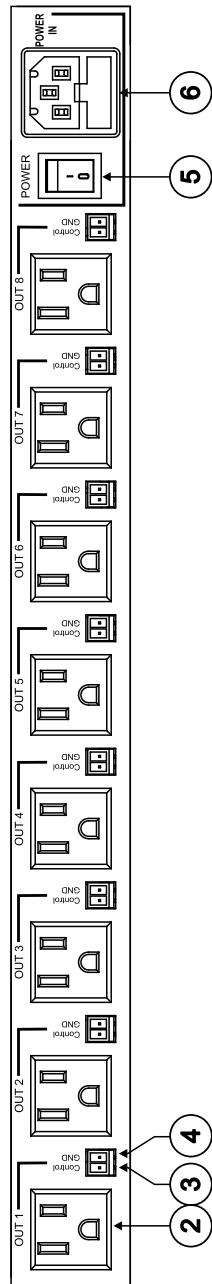


Figure 2: RB-8E Rear Panel

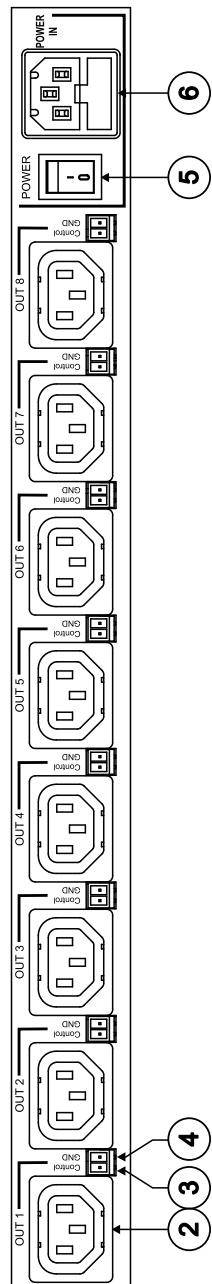


Figure 3: RB-8 Rear Panel

5 Installing the RB-8/RB-8E in a Rack

This section describes how to install the **RB-8/RB-8E** in a rack.

Before Installing on a Rack

Before installing on a rack, be sure that the environment is within the recommended range:	
Operating temperature range	+5° to +45° C (41° to 113° F)
Operating humidity range	10 to 90% RHL, non-condensing
Storage temperature range	-20° to +70° C (-4° to 158° F)
Storage humidity range	5 to 95% RHL, non-condensing



CAUTION!!

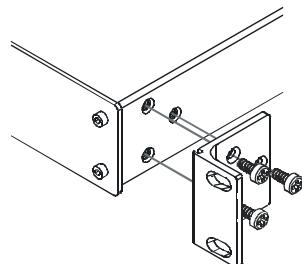
When installing on a 19" rack, avoid hazards by taking care that:

1. It is located within the recommended environmental conditions, as the operating ambient temperature of a closed or multi unit rack assembly may exceed the room ambient temperature.
2. Once rack mounted, enough air will still flow around the machine.
3. The machine is placed straight in the correct horizontal position.
4. You do not overload the circuit(s). When connecting the machine to the supply circuit, overloading the circuits might have a detrimental effect on overcurrent protection and supply wiring. Refer to the appropriate nameplate ratings for information. For example, for fuse replacement, see the value printed on the product label.
5. The machine is earthed (grounded) in a reliable way and is connected only to an electricity socket with grounding. Pay particular attention to situations where electricity is supplied indirectly (when the power cord is not plugged directly into the socket in the wall), for example, when using an extension cable or a power strip, and that you use only the power cord that is supplied with the machine.

How to Rack Mount

To rack-mount a machine:

1. Attach both ear brackets to the machine. To do so, remove the screws from each side of the machine (3 on each side), and replace those screws through the ear brackets.



2. Place the ears of the machine against the rack rails, and insert the proper screws (not provided) through each of the four holes in the rack ears.

Note that:

- **In some models, the front panel may feature built-in rack ears**
- Detachable rack ears can be removed for desktop use
- Always mount the machine in the rack before you attach any cables or connect the machine to the power
- If you are using a Kramer rack adapter kit (for a machine that is not 19"), see the Rack Adapters user manual for installation instructions (you can download it at: <http://www.kramerelectronics.com>)

6 Connecting the RB-8/RB-8E

To connect the **RB-8/RB-8E**, as illustrated in *Figure 4*, do the following:

1. Connect the power cable from each external device to any free power output port on the **RB-8/RB-8E**.
2. Connect a switched cable to the CONTROL/GROUND contact of the same port (for example, from the **PL-8 Low Voltage Relay Controller** as shown in *Figure 2*.)
3. Connect the power cord to the **RB-8/RB-8E** (not illustrated in *Figure 2*.)

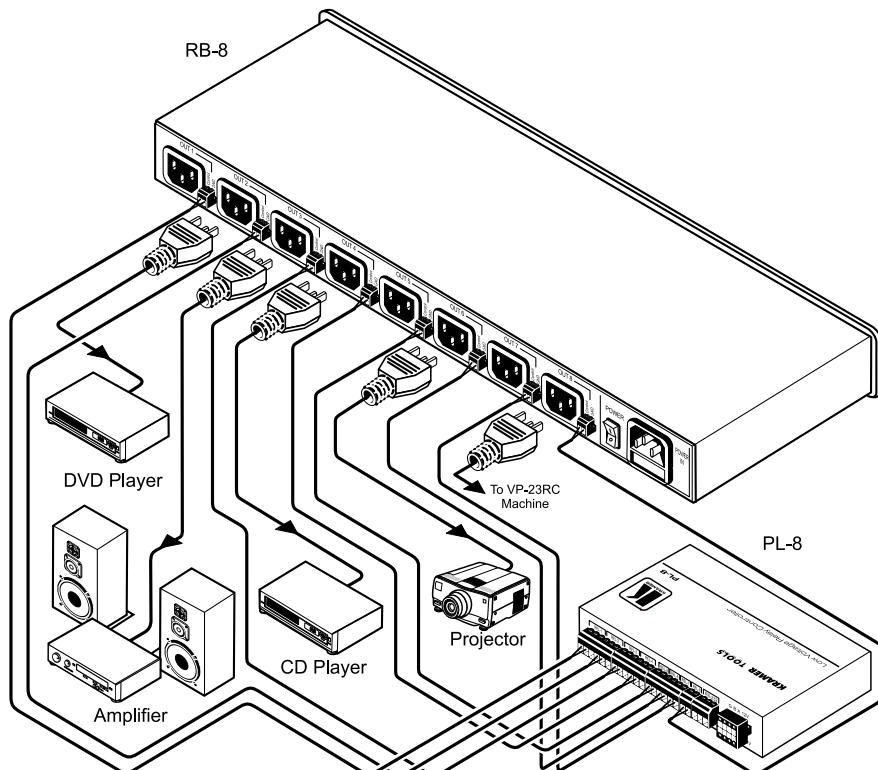


Figure 4: Connecting the RB-8

7 Operating the RB-8/RB-8E

To operate the **RB-8/RB-8E**:

- Turn on the power on the **RB-8/RB-8E**.
- Power on each external device by closing the CONTROL contact associated with its port.

Each port that supplies power is indicated by an illuminated LED on the front panel.

8 Technical Specifications

The **RB-8/RB-8E** technical specifications are shown in *Table 2*:

*Table 2: RB-8/RB-8E Technical Specifications*¹

POWER SOURCE:	110–220V AC
POWER OUTPUT:	RB-8: 16A (2.0A maximum output with 8 connections) RB-8E: 10A (1.25A maximum output with 8 connections)
DIMENSIONS	19" x 7" x 1U W, D, H
WEIGHT:	2.0kg (4.4lbs)
ACCESSORIES:	Power cord (American or European depending on the model), rack ears

¹ Specifications are subject to change without notice

LIMITED WARRANTY

Kramer Electronics (hereafter *Kramer*) warrants this product free from defects in material and workmanship under the following terms.

HOW LONG IS THE WARRANTY

Labor and parts are warranted for seven years from the date of the first customer purchase.

WHO IS PROTECTED?

Only the first purchase customer may enforce this warranty.

WHAT IS COVERED AND WHAT IS NOT COVERED

Except as below, this warranty covers all defects in material or workmanship in this product. The following are not covered by the warranty:

1. Any product which is not distributed by Kramer, or which is not purchased from an authorized Kramer dealer. If you are uncertain as to whether a dealer is authorized, please contact Kramer at one of the agents listed in the Web site www.kramerelectronics.com.
2. Any product, on which the serial number has been defaced, modified or removed, or on which the WARRANTY VOID IF TAMPERED sticker has been torn, reattached, removed or otherwise interfered with.
3. Damage, deterioration or malfunction resulting from:
 - i) Accident, misuse, abuse, neglect, fire, water, lightning or other acts of nature
 - ii) Product modification, or failure to follow instructions supplied with the product
 - iii) Repair or attempted repair by anyone not authorized by Kramer
 - iv) Any shipment of the product (claims must be presented to the carrier)
 - v) Removal or installation of the product
 - vi) Any other cause, which does not relate to a product defect
 - vii) Cartons, equipment enclosures, cables or accessories used in conjunction with the product

WHAT WE WILL PAY FOR AND WHAT WE WILL NOT PAY FOR

We will pay labor and material expenses for covered items. We will not pay for the following:

1. Removal or installations charges.
2. Costs of initial technical adjustments (set-up), including adjustment of user controls or programming. These costs are the responsibility of the Kramer dealer from whom the product was purchased.
3. Shipping charges.

HOW YOU CAN GET WARRANTY SERVICE

1. To obtain service on you product, you must take or ship it prepaid to any authorized Kramer service center.
2. Whenever warranty service is required, the original dated invoice (or a copy) must be presented as proof of warranty coverage, and should be included in any shipment of the product. Please also include in any mailing a contact name, company, address, and a description of the problem(s).
3. For the name of the nearest Kramer authorized service center, consult your authorized dealer.

LIMITATION OF IMPLIED WARRANTIES

All implied warranties, including warranties of merchantability and fitness for a particular purpose, are limited in duration to the length of this warranty.

EXCLUSION OF DAMAGES

The liability of Kramer for any effective products is limited to the repair or replacement of the product at our option. Kramer shall not be liable for:

1. Damage to other property caused by defects in this product, damages based upon inconvenience, loss of use of the product, loss of time, commercial loss; or.
2. Any other damages, whether incidental, consequential or otherwise. Some countries may not allow limitations on how long an implied warranty lasts and/or do not allow the exclusion or limitation of incidental or consequential damages, so the above limitations and exclusions may not apply to you.

This warranty gives you specific legal rights, and you may also have other rights, which vary from place to place.

NOTE: All products returned to Kramer for service must have prior approval. This may be obtained from your dealer.

This equipment has been tested to determine compliance with the requirements of:

EN-50081: "Electromagnetic compatibility (EMC); generic emission standard.

Part I: Residential, commercial and light industry"

EN-50082: "Electromagnetic compatibility (EMC) generic immunity standard.

Part I: Residential, commercial and light industry environment".

CFR-47: FCC Rules and Regulations:

Part 15: "Radio frequency devices

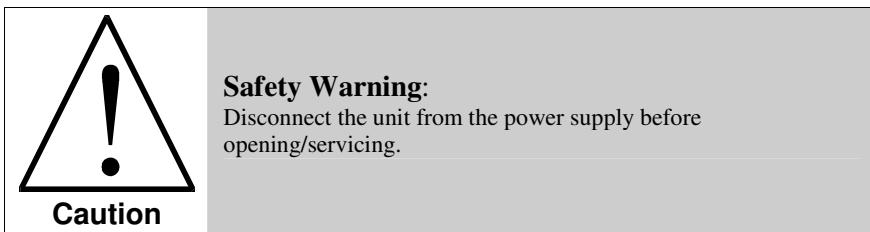
Subpart B Unintentional radiators"

CAUTION!

- ☒ Servicing the machines can only be done by an authorized Kramer technician. Any user who makes changes or modifications to the unit without the expressed approval of the manufacturer will void user authority to operate the equipment.
- ☒ Use the supplied DC power supply to feed power to the machine.
- ☒ Please use recommended interconnection cables to connect the machine to other components.



For the latest information on our products and a list of Kramer distributors, visit our Web site: www.kramerelectronics.com where updates to this user manual may be found. We welcome your questions, comments and feedback.



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